C. Remarks

Based on the above amendments and remarks to follow, reconsideration of this application is respectfully requested.

In the office action, claims 1-12 and 14-16 were rejected under 35 U.S.C. 102(e) as being anticipated by Hyde (U.S. Patent No. 7,131,963). Claims 13, 17-22, and 25 were rejected under 35 U.S.C. 103(a) as being unpatentable over Hyde in view of Lary et al. (U.S. Patent Application Publication No. 2003/0120256). Claims 23 and 24 were rejected under 35 U.S.C 103(a) as being unpatentable over Hyde in view of Lary et al., and further in view of Brodersen (U.S. Patent Application Publication No. 2005/0033227). Further, claims 13 and 17-25 were objected due to insufficient antecedent basis. The drawings were objected to under 37CFR 1.83(a), and as failing to comply with 37 CFR 1.84(p)(5).

In response to the objections to the drawings, claims 4, 11, and 25 have been cancelled without prejudice or disclaimer. Further, the specification has been amended to add the reference character(s), 808, in the description section. In order to reduce the number of issues presented by this application, dependent claims 2 and 7 have been cancelled without prejudice. Further, claims 1, 8, 12, 13, and 17 have been amended.

The Declaration

In the office action, the oath or declaration was said to be defective, this objection is respectfully traversed. The undersigned has reviewed the declaration and it does *not* appear to contain the objectionable language set forth in the office action.

Nevertheless applicant will correct any, defect with a new declaration, if any defects are found

Descriptions and Differences of the Claims from the Cited Art:

In order to more clearly define, and distinctly claim the present invention from that of Hyde, and in order to establish the non-obviousness of the present invention in view of the cited prior art including Hyde, Lary et al., and Brodersen, independent claims 1, 8, 12, and 17 have been amended. Further, dependent claim 13 has been amended.

As set forth in the preamble of independent claims 1, 8, 12, and 17, as amended, the catheter system/sclerosing system and the method of the present invention relates to sclerosing a blood vessel *while maintaining a pressure on the blood vessel and carrying out continuous irrigation and suction inside the blood vessel.* The support for these recitations are found at pp 6, lines 6-9, pp 8, lines 13-17 and line 19-20, pp 11, line 6-11, pp12, lines 9-11 and line 25-26. The catheter system includes a multi-lumen tube having a proximal and a distal end. The multi-lumen tube comprises a center lumen, coaxial to the multi-lumen tube and at least two outer lumens, disposed in the annulus between the center lumen and the outer wall of the multi-lumen tube. The center lumen is used for carrying a sclerosing agent to the blood vessel and for passing a guide wire.

Clause (a) of independent claims 1, 8, and 12 have been amended to disclose that the outer lumens are used for carrying an irrigation fluid inside the blood vessel and carrying out *irrigation and suction inside the blood vessel. The irrigation fluid is* *used for flushing away blood clots that may develop in the blood vessel during a surgery. Further, continuous irrigation and suction inside the blood vessel prevents formation of any new clots inside the vessel.* Clause (c) of independent claim 17 has also been added to disclose the above mentioned feature of the invention. The support for this recitation is found at pp 6, line 7-8, pp 8, lines 13-17 and line 19-20, pp 11, line 10-11 and pp 12, line 25-26.

The catheter system, as disclosed in the present invention, also includes a tip device, coupled to the distal end of the multi-lumen tube. The tip device is conical in shape and enables the catheter to move in the blood vessel with greater ease. Clause (b) of independent claim 1 has been amended, and Clause (b) of independent claim 8 has been added to disclose that the tip device has a circumferential depression with one or more ports. The presence of the circumferential depression allows a cavity to be formed between the inner surface of the blood vessel and the tip device. The cavity is filled with the sclerosing agent and the sclerosing agent comes in contact with the complete circumference of the blood vessel, and thus *provides uniform and complete sclerosis of the blood vessel.* Clause (b) of independent claim 12 has been added to disclose that the tip device is used for infusing the sclerosing agent uniformly into the blood vessel. The support for this recitation is found at pp 9, lines 10-27 and Fig. 3.

Still further, the catheter system includes a fluid porting device, coupled to the proximal end of the multi-lumen tube. Clause (c) of independent claim 1 has been added to disclose that the fluid porting device is used for porting the sclerosing agent and the irrigation fluid into the multi-lumen tube and providing suction of the fluids through the multi-lumen tube. The support for this recitation is found at pp 5, line 27, pp

6, lines1-2, pp 8, line 13-14.

Additionally, the catheter system as disclosed in the present invention includes a pressure applying device. *The pressure applying device is used for applying and maintaining pressure on the blood vessel. This helps in removing blood from the blood vessel and preventing the flow of blood in a treated section of the blood vessel.* Further, this helps in preventing the sclerosing agent from entering into perforator veins connected to the blood vessel. The support for this recitation is found at pp 6, lines 6-7, pp 11, lines 6-10, and pp 12, lines 9-11 of the present application.

In contrast, Hyde does not disclose a pressure applying device for applying and maintaining pressure on the blood vessel. Further, Hyde does not disclose *continuous irrigation and suction inside the blood vessel while maintaining appropriate pressure on the blood vessel.* Unlike the present invention, Hyde does not describe a circumferential depression in the tip device. Hyde only mentions that a number of infusion ports are disposed between a first inflatable member and a second inflatable member (Column 5, lines 45-65). Further, the infusion ports are used for releasing a variety of bioactive agents. In light of the above discussion, it is respectfully submitted that the independent claims 1, 8, and 12 as amended, are not anticipated by Hyde.

Lary et al. discloses a system and a method for sclerosing a blood vessel, wherein a pressure applying device is used only to facilitate the injection of sclerosing agent into the blood vessel. Unlike the present invention, the pressure applying device as disclosed in Lary et al. *does not perform the function of removing blood from the blood vessel and preventing the flow of blood in a treated section of the blood vessel.* Further, it does not perform the function of preventing the sclerosing agent from entering into perforator veins connected to the blood vessel. Furthermore, Lary et al. does not describe sclerosing a blood vessel while maintaining continuous irrigation and suction inside the blood vessel.

In light of the above discussion, it is respectfully submitted that the independent claim 17 as amended, is not rendered obvious by Lary et al. Further, dependent claims 18-24 have recitations, which when read in conjunction with independent claim 17 demonstrate that the present invention is nonobvious over Lary et al., and hence should be allowable.

Additionally, claims 13 and 17-24 have been amended to remove the objection raised due to insufficient antecedent basis for the limitations recited in these claims.

Claims 23 and 24 were rejected under 35 U.S.C 103(a) as being unpatentable over Hyde in view of Lary et al., and further in view of Brodersen. The method of the present invention relates to sclerosing a blood vessel *while maintaining appropriate pressure on the blood vessel and carrying out continuous irrigation and suction inside the blood vessel using a catheter system.* The outer lumens of the catheter system are used for carrying an irrigation fluid inside the blood vessel. *The irrigation fluid is used for flushing away blood clots that may develop in the blood vessel during a surgery. Further, continuous irrigation and suction inside the blood vessel prevents formation of any new clots inside the blood vessel.* Brodersen discloses a catheter system having a multi-lumen tube for sclerosing a blood vessel wherein an underpressure is applied to one of the lumens of the multi-lumen tube in order to evacuate excess sclerosing agent from the blood vessel. Brodersen does not teach that the outer lumens are used for the removal of blood clots that may develop in the blood vessel during the surgery and preventing the formation of any new clots inside the blood vessel. In light of the above discussion, it is respectfully submitted that dependent claims 23 and 24 are not rendered obvious by Hyde in view of Lary et al., and further in view of Brodersen.

In response to the objections to the drawings under 37 CFR 1.83(a), claims 4, 11, and 25 have been cancelled. Further, claim 13 has been amended to replace the saphenous vein compressor with a pressure applying device. It is respectfully submitted that since a pressure applying device is not just restricted to a saphenous vein compressor, but may include other means for applying pressure such as an elastic rubber esmark bandage, towel wraps, gauze bandage wraps, support stockings or hand pressure. Therefore, there is no need to illustrate the pressure applying device in the drawings.

Therefore, in view of the above discussion, it is respectfully submitted that independent claims 1, 8, 12, and 17 are neither anticipated, nor rendered obvious by the publications to Hyde, Lary et al., and Brodersen. The amendments to independent claims 1, 8, 12, and 17 are sufficient to remove the rejections under 35 U.S.C. § 102(e) and 35 U.S.C. § 103(a). Therefore, we request reconsideration of independent claims 1, 8, 12, and 17.

It is respectfully submitted that dependent claims 3, 5, 6, 9-10, 13-16, and 18-24 have recitations, which when read in conjunction with independent claims 1, 8, 12, and 17, demonstrate that the present invention is novel and nonobvious over the Hyde, Lary et al., and Brodersen publications, and thus are allowable.

Further, it is submitted that the cancellation of claims 4, 11, and 25, is sufficient to remove the objections under 37 CFR 1.83(a).

The present claims have been amended to highlight the distinctions of the present invention over the prior art and it is respectfully submitted that the claims are now clearly patentable over the art of record, and notice to that effect is earnestly solicited, If the Examiner has any questions regarding this matter, the Examiner is requested to telephone applicants attorney at the numbers listed below prior to issuing a further action.

Dated:October 24, 2007

Respectfully Submitted,

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